

Amendments to the Specification:

Please replace the title with the following redlined title:

FUEL CELL SYSTEM METHOD, AND APPARATUS ~~AND SCHEDULING~~
EMPLOYING OXYGEN SENSOR

Please delete the paragraphs beginning at page 2, line 12, and ending at page 4, line 2.

Please add, beginning at page 2, between lines 11 and 12, the following new paragraphs:

In one aspect, a control system for a fuel cell assembly comprises an oxygen sensor and a switch that is actuatable to stop fuel cell operation in response to a high hydrogen condition indicated by a reading from the oxygen sensor. The control system can, for example, further include a hydrogen sensor and a temperature sensor. The switch can, for example, take the form of a programmed controller configured to compare oxygen, hydrogen and temperature readings to threshold values to determine the existence of a low oxygen condition, a high hydrogen condition or a high temperature condition, and an actuator to stop fuel cell operation in response to a low oxygen condition, a high hydrogen condition or a high temperature condition.

In another aspect, a fuel cell system comprises at least one fuel cell, an oxygen sensor, a hydrogen sensor and a switch that is selectively actuatable to stop fuel cell operation in response to a high hydrogen condition indicated by a reading from the hydrogen sensor or the oxygen sensor. The fuel cell system can, for example, include two switches, each switch including a controller that compares oxygen or hydrogen readings to corresponding threshold values, a fuel flow valve, and an actuator that closes the fuel flow valve, terminating the flow of fuel to the fuel cell in response to a signal from the controller.

In a further aspect, a method of operating a fuel cell assembly comprises determining the concentration of oxygen proximate the fuel cell and providing fuel to the fuel cell if the concentration of oxygen is greater than an oxygen threshold value. The method may comprise writing a shutdown code to a non-volatile memory if a fault occurred, and setting a non-restartable status in the non-volatile memory if a non-restartable fault occurred.

In yet a further aspect, a computer-readable media contains instructions to cause a processor to control operation of a fuel cell assembly by determining the concentration of oxygen proximate the fuel cell assembly and providing fuel to the fuel cell if the concentration of oxygen is greater than an oxygen threshold value. The computer-readable media can, for example, comprise the memory structure of a micro-controller.